NON-PUBLIC?: N
ACCESSION #: 9510120233
LICENSEE EVENT REPORT (LER)

FACILITY NAME: Donald C. Cook Nuclear Plant - Unit 2 PAGE: 1 OF 3

DOCKET NUMBER: 05000316

TITLE: Reactor Trip From Reactor Trip Breaker Control Switch Mispositioning Resulting From a Cognitive Personnel Error
EVENT DATE: 09/08/95 LER #: 95-006-00 REPORT DATE: 10/09/95

OTHER FACILITIES INVOLVED: DOCKET NO: 05000

OPERATING MODE: 1 POWER LEVEL: 100

THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR SECTION:
50.73(a)(2)(iv)

LICENSEE CONTACT FOR THIS LER:
NAME: W. Nichols, Operations TELEPHONE: (616) 465-5901
Superintendent x2536

COMPONENT FAILURE DESCRIPTION:
CAUSE: SYSTEM: COMPONENT: MANUFACTURER:
REPORTABLE NPRDS:

SUPPLEMENTAL REPORT EXPECTED: NO

ABSTRACT:

On September 8, 1995 at 2125 hours, while Unit 2 Was at 100 percent Reactor Thermal Power, a reactor trip occurred on a manual reactor trip signal. The reactor trip signal resulted from a cognitive error by Operations personnel while supporting a surveillance test-on the Solid State Protection System (SSPS). The Reactor Operator improperly placed a reactor trip breaker control switch in the trip position while intending to close the breaker.

Operations personnel implemented plant procedures to verify proper response of the automatic protection systems and to assess plant conditions for initiating recovery actions. All safety systems operated normally in response to the trip signal, and the unit was stabilized in Mode 3, Hot Standby.

Administrative actions have been taken to lessen the possibility of a recurrence, and the Operations Department has developed an action plan to minimize the number of events caused by personnel errors.

It was determined that the health and safety of the public were not jeopardized by this event.

END OF ABSTRACT

Conditions Prior To Event

Unit 2 was in Mode 1, Power Operation, at 100 percent Reactor Thermal Power

Description of Event

On September 8, 1995 at 2125 hours, a reactor trip occurred when the Train A reactor trip breaker (EIIS/AA) control switch was inappropriately placed in the trip position by Operations personnel.

Unit 2 had been in power operation for less than 48 hours. Due to the recent power ascension, the reactor was undergoing a significant xenon transient. To offset the effects of increasing xenon concentration, the Reactor Operator was frequently injecting primary water into the Reactor Coolant System (RCS) (EIIS/AB). In order to start the primary water injection flow, the blender control switch (EIIS/CB) must be momentarily placed in the stop position before it is placed in the start position.

The same individual who was performing the primary water injection was also assigned to support Instrument and Control (I&C) personnel for a surveillance test of Train A Solid State Protection System (SSPS) (EllS/JG). As a part of the surveillance test, the Train A reactor trip bypass breaker (EIIS/AA) was closed. The Train A reactor trip breaker (EIIS/AA) was then opened, per procedure, at the local panel. The Operations person in the control room was then asked by I&C to close the Train A reactor trip breaker (EIIS/AA) in accordance with the surveillance procedure.

The Reactor Operator, who was in the routine of resetting the blender control switch (EIIS/CB) before starting primary water injection, operated the reactor trip breaker (EIIS/AA) in the same manner, placing the reactor trip breaker control switch in the trip position before it was placed in the closed position. When the control switch was placed in "trip", a manual reactor trip signal was generated which opened both the

Train B reactor trip breaker and the Train A reactor trip bypass breaker.

Cause of the Event

The cause of the event was a cognitive error by Operations personnel. The error was a result of preconditioning from working with a system which operated in a different manner.

Analysis of Event

This event is being reported per the requirements of 10CFR50.73 (a)(2)(iv), as an event that resulted in automatic actuation of the Reactor Protection System. During this event, all Reactor Protection System and Engineering Safety Features responded as designed to mitigate the consequence of the transient. The health and safety of the public were not jeopardized.

Following the reactor trip, all equipment functioned normally. Two of the feedwater isolation valves did not automatically close due to the fact that the automatic closure functions were bypassed per the surveillance procedure in progress. Both feedwater isolation valves were manually closed by the control room personnel upon the reactor trip. Since all four feedwater regulating valves automatically closed upon the reactor trip, this is not a safety concern.

Corrective Actions

The surveillance procedure was revised to add a caution on the operation of the reactor trip breaker control switch. The procedure was also revised to be an "in-hand" procedure.

A placard with the instructions on reactor trip breaker control switch operation has been prepared to aid Operations personnel during Solid State Protection System testing.

Disciplinary actions have been completed for the involved individuals. Training material has been prepared on the lessons learned from the event for continuous training for Operations personnel.

The Operations Department management developed an action plan to minimize events caused by personnel errors. This plan includes long term provisions to improve the quality of operating procedures, enhance the structure of pre-job briefings, and promote a continuously self-checking culture among the operations personnel. The action plan also focuses on

establishing and maintaining an environment among the operations personnel in which all personnel, regardless of their experience level, are encouraged to ask questions whenever a doubt exists about plant conditions or system operation. All Operations shift personnel were briefed on the action plan.

Previous Similar Events

LER 315/90-004-00

ATTACHMENT TO 9510120233 PAGE 1 OF 1

Indiana Michigan
Power Company
Cook Nuclear Plant
One Cook Place
Bridgman, MI 49106
616 465 5901

AEP
INDIANA
MICHIGAN
POWER

October 9, 1995

United States Nuclear Regulatory Commission
Document Control Desk
Rockville, Maryland 20852

Operating Licenses DPR-74
Docket No. 50-316

Document Control Manager:

In accordance with the criteria established by 10 CFR 50.73 entitled Licensee Event Report System, the following report is being submitted:

95-006-00

Sincerely,

A. A. Blind
Plant Manager

/clc

Attachment

c: H. J. Miller, Region III
E. E. Fitzpatrick
P. A. Barrett
R. F. Kroeger
M. A. Bailey - Ft. Wayne
S. J. Brewer
M. R. Padgett
G. Charnoff, Esq.
D. Hahn
Records Center, INPO
NRC Resident Inspector

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